

IN THE DRAWINGS

Applicants enclose Replacement Sheets for Figs. 20-26 with the added caption “Prior Art.”

REMARKS

Claim 1-8 have been canceled. Claims 9-17 are pending in the application.

Applicants amend the specification and drawings for corrections. No new matter has been added.

Applicants respectfully request that the Examiner acknowledge the priority claim and receipt of all certified copies of the priority documents for this application.

The Examiner objected to Figs. 20-26 under MPEP § 608.02(g) for failing to designate that which is old as “Prior Art.” Applicants enclose Replacement Sheets for these figures with the added caption “Prior Art,” and request that the Examiner withdraw the objection.

The Examiner objected to the specification to request that Applicants update the status information of the parent application, which has issued as a patent. Applicants amend the specification accordingly, and request that the Examiner withdraw the objection.

Claims 10-17 stand rejected under nonstatutory obviousness-type double patenting grounds as being unpatentable over claims 1-8 of the parent application, which issued as U.S. Patent No. 6,646,999.

Applicants submit herewith a terminal disclaimer to obviate the rejection.

Claim 9 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Applicants’ Admitted Prior Art (“AAPA”). Applicants respectfully traverse the rejection.

The Examiner relied upon Figs. 20-23 and their corresponding description in the background section of the specification as alleged AAPA that illustrates the features recited in claim 9.

Applicants respectfully point out that Figs. 20-23 of the application only illustrate location registration servers 20-4-1 to 20-4-3 for respective groups of “terminal numbers (for example, E.164 addresses)” having the same high-order digits” that are assigned to respective

mobile terminals, the “E.164 [being] the international standard telephone numbering (terminal addressing) scheme defined by the ITU-T.” Page 2, line 16 to page 3, line 1 of the specification. Thus, the cited portions of the alleged AAPA only include description of terminal numbers that are pre-assigned to each mobile terminal being the basis for grouping them to location registration servers, and, thus, the basis for corresponding location registration server lookups for communications between the mobile terminals and “fixed equipment.” In other words, the cited portions of the background section of the application, or the alleged AAPA, only include description of the location registration servers 20-4-1 to 20-4-3 performing location registration and lookups for communications illustrated in Figs. 21-23 of the application based on the aforementioned terminal numbers having the high-order digits, which require address translation at gate nodes for transmissions from the “fixed equipment” such as an ISP. Please see Fig. 22 and page 5, lines 11-17 of the specification.

Such portions of AAPA, therefore, do not disclose the claimed features of a register in a location registration server storing an address of a subscriber node currently serving each mobile terminal for each mobile terminal assigned a packet address containing a high-order digit of packet destination address associated with the location registration server, or stores an address of a gate node to which each fixed equipment is connected for each fixed equipment assigned a packet address containing the high-order digit, where the location registration server retrieves information by reference to a destination packet address contained in a packet received, where a mobile terminal corresponds to the destination address or the address of a receiving gate node connected to fixed equipment corresponds to the destination address.

In other words, AAPA, as relied upon by the Examiner, does not disclose,

“[a] location registration server for a use in a mobile packet communication system including mobile terminals connected via a mobile radio communication network, subscriber nodes accommodating said mobile terminals, and gate nodes connected to fixed equipment including Internet

service providers or local area networks, said location registration server being associated with a group of destination packet addresses having the same high-order digits, wherein said subscriber nodes, said gate nodes, and said location registration server are interconnected by a network and are each assigned a unique packet address for routing, said location registration server comprising:

a register which stores, for each mobile terminal assigned a packet address containing the high-order digit of packet destination address associated with said location registration server, the address of a subscriber node currently serving said each mobile terminal, or stores, for each fixed equipment assigned a packet address containing said high-order digit, the address of a gate node to which said each fixed equipment is connected;

means for retrieving, by reference to a destination packet address contained in a packet received from a transmitting node which is a subscriber node that received a packet from a particular mobile terminal or a gate node that received a packet from particular fixed equipment, the address of a mobile terminal corresponding to said destination address or the address of a receiving gate node connected to the fixed equipment corresponding to said destination address; and

means for returning the retrieved receiving node address to said transmitting node,” as recited in claim 9.
(Emphasis added)

Advantageously, the claimed invention provides for “packet transfers from the fixed equipment to the mobile terminal and from the mobile terminal to the fixed equipment ... in accordance with the same operation procedure and based on the packet addresses of the same addressing scheme.” Page 31, line 7 to page 32, lines 21 of the specification.

Accordingly, Applicants respectfully submit that claim 9 is patentable over AAPA for at least the foregoing reasons.

Claim 10 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of U.S. Patent No. 6,393,269 to Hartmaier et al. Applicants respectfully traverse the rejection. Applicants respectfully traverse the rejection.

The Examiner acknowledged that AAPA fails to disclose the features with respect to the claimed temporarily stored receiving node address, and relied upon Hartmaier et al. as a

combining reference that allegedly suggests this feature. In particular, the Examiner relied upon the description in Hartmaier et al. of a MSC storing a trigaddrlist from a HLR in a temporary subscriber database as alleged suggestion of these features.

Applicants respectfully submit that AAPA, as cited and relied upon by the Examiner, fails to disclose or suggest the claimed destination packet address features, as described above with respect to claim 9, corresponding features of which are incorporated in claim 10. And the Examiner relied upon Hartmaier et al. as a combining reference to specifically address the temporary address storage features also recited in claim 10. As such, the addition of this reference would still have failed to cure the above-described deficiencies of AAPA with respect to the packet address features, even assuming, arguendo, that such an addition would have been obvious to one skilled in the art at the time the claimed invention was made.

Hartmaier et al. describe a signaling technique for network-based pre-paid wireless telephone service, wherein a Mobile Switching Center (MSC) sends a registration notification (RegNot) command to a Home Location Register (HLR) and the HLR responds to the RegNot command. And the cited portions of Hartmaier et al. only include description of the MSC itself including a Visitor Location Register (VLR) for storing profile information “on the capabilities and permitted activities of the subscriber.” Col. 6, lines 4-6 of Hartmaier et al. The trigaddrlist cited by the Examiner refers to “triggers” for such capabilities and activities, where the network address of the device associated with each “trigger,” again, merely refers to the device associated with such triggers for the corresponding activities, such as “Busy” and “No Answer”. Please see, e.g., col. 5, line 67 of Hartmaier et al. Thus, such “addresses” do not correspond to any transfer of a subsequent packet for any particular destination address of a received packet.

Therefore, Hartmaier et al., as cited and relied upon by the Examiner, do not teach or suggest the claimed storing means for temporarily storing the receiving node address returned

from the location registration server, or the claimed features of the receiving node address temporarily stored in the storing means being used to transfer a subsequent packet having the same destination address as the received packet directly to the receiving node.

In other words, even assuming, arguendo, that it would have been obvious to one skilled in the art at the time the claimed invention was made to combine the references as proposed by the Examiner, such a combination would still have failed to disclose or suggest,

“[a] subscriber node for use in a mobile packet communication system comprising mobile terminals connected via a mobile radio communication network, gate nodes connected to fixed equipment including Internet service providers or local area networks, and a plurality of location registration servers each for a group of destination packet addresses having the same high-order digits, wherein said subscriber node accommodates said mobile terminals, said subscriber node, said gate nodes, and said location registration servers are interconnected by a network, and said subscriber node, said gate nodes, and said location registration servers are each assigned a unique address for routing , said subscriber node comprising:

means for receiving a packet from a particular accommodated mobile terminal;

a table for retrieving the address of a corresponding location registration server by reference to the high-order digits of the packet destination address;

means for transferring said received packet to said corresponding location registration server;

means for receiving a receiving node address returned from said corresponding location registration server, retrieved by the corresponding location registration serve with reference to a destination address contained in said received packet;

means for temporarily storing said receiving node address returned from said location registration server; and

means for transferring a subsequent packet having the same destination address as the received packet directly to said receiving node by using said temporarily stored receiving node address,” as recited in claim 10. (Emphasis added)

Accordingly, Applicant respectfully submits that claim 10 is patentable over the cited references for at least the foregoing reasons.

In view of the remarks set forth above, this application is in condition for allowance which action is respectfully requested. However, if for any reason the Examiner should consider this application not to be in condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Any fee due with this paper may be charged to Deposit Account No. 50-1290.

Respectfully submitted,

/Dexter Chang/

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